# NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

## **FACT SHEET**

(pursuant to Nevada Administrative Code 445A.236)

**Permittee Name:** City of Las Vegas

2875 Ronemus Drive Las Vegas, NV 89128

Permit Number: NEV2001514

**Location:** Durango Hills Family Golf Course

(Formerly Northwest Family Golf Course)

3501 N. Durango Drive

Las Vegas, Clark County, Nevada 89129-7277

Township20S, Range 60E, Section 8

Latitude: 36° 13.43′ N Longitude: 115° 16.73′ W

Flow: Daily Maximum: 1.0 MGD

30-Day Average: 0.83 MGD

## **Wellhead Protection:**

Durango Hills Family Golf Course is not within a Wellhead Protection Program capture zone.

There are six Las Vegas Valley Water District wells in close proximity to the property. Wells 114 and 115 are drinking water wells, and are located near the north property line of the golf course. Wells 118, 119, 120, and 121 are recharge/recovery wells, the purpose of which is to store potable water during the winter months (lower demand) and recover that water during summer months (high demand). Wells 118 and 120 are located near the east and west property lines, respectively, approximately midway between the north and south property lines. Wells 119 and 121 are located near the southern golf course boundary.

### **General:**

The City of Las Vegas owns and operates the Durango Hills Family Golf Course, located at 3501 N. Durango Drive in the northwest area of Las Vegas, Clark County, Nevada. The 18-hole golf course includes approximately 75 acres of turf and landscaped areas, which are irrigated with a blend of potable water and reclaimed tertiary treated and disinfected wastewater effluent from the adjacent Durango Hills Water Resource Center (NDEP Permit NEV98005). The course has one lined storage lake. Application of effluent/potable water blend is by spray irrigation.

# **Discharge Characteristics:**

During the period from October 2002 through June 2006, Durango Hills Family Golf Course reported the following water quality data:

Parameter		Average	Maximum	Minimum
Flow (MGD)	30-Day Average (MGD) (Permit Limit = 0.83 MGD)	0.61	4.6	0.04
	Daily Maximum (MGD) (Permit Limit = 1.0 MGD)	0.94	5.02	0.16
Total Coliform Bacteria (CFU or MPN / 100 ml) (1)	Geometric Mean (Permit Limit = 2.2)		2.64	0.55
	Daily Maximum (Permit Limit = 23)		540	1.1
Total Nitrogen (2) (mg/l)	Average (Permit Limit = M&R)	16.07	24.5	7.2
	Daily Maximum (Permit Limit = M&R)	19.44	47.8	10.5
Total Kjeldahl Nitrogen (mg/l)	Average (Permit Limit = M&R)	4.56	19.6	0.9
	Daily Maximum (Permit Limit = M&R)	6.55	47.3	1.0
Total Oxidized Nitrogen (3) (mg/l)	Average (Permit Limit = M&R)	12.38	24.5	1.4
	Daily Maximum (Permit Limit = M&R)	15.33	30.5	2.3
Ammonia (mg/l)	Average (Permit Limit = M&R)	2.49	18	<0.1
	Daily Maximum (Permit Limit = M&R)	3.9	26.1	<0.1

- (1) CFU = Colony Forming Units; MPN = Most Probable Number.
- (2) Total Nitrogen as N may be reported as the sum of Total Kjeldahl Nitrogen and Total Oxidized Nitrogen.
- (3) Total Oxidized Nitrogen = Nitrate + Nitrite
- (4) M&R = Monitor and Report

# **Receiving Water Characteristics:**

Groundwater below the site is encountered at approximately 500 feet below ground surface (bgs), as determined from Las Vegas Valley Water District recharge/recovery wells located near the course. Groundwater flow direction is to the southeast. Effluent reuse is not expected to significantly impact groundwater. Monitor wells are not required due to the extreme depth to groundwater.

# **Proposed Effluent Limitations and Monitoring Requirements:**

Proposed effluent limitations and monitoring requirements for the Durango Hills Family Golf Course reuse permit are the following:

PARAMETERS	EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS	
	30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)	0.83	1.0	Continuous	Flow Meter
Total Coliform (CFU or MPN/100 ml) (1)	2.2	23	Weekly	Discrete
Total Nitrogen as N (2) (mg/l)	Monitor and Report		Monthly	Calculate
Total Kjeldahl Nitrogen as N (mg/l)	Monitor and Report		Monthly	Composite
Total Oxidized Nitrogen as N (3) (mg/l)	Monitor and Report		Monthly	Composite
Ammonia a N (mg/l)	Monitor and Report		Monthly	Composite

- (1) CFU = Colony Forming Units; MPN = Most Probable Number.
- (2) Total Nitrogen as N may be reported as the sum of Total Kjeldahl Nitrogen and Total Oxidized Nitrogen.
- (3) Total Oxidized Nitrogen = Nitrate + Nitrite

### **Schedule of Compliance:**

The Permittee shall implement and comply with the provisions of the following schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance.

- a. The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit
- b. **By February 28, 2007,** the Permittee shall adequately address all comments and concerns relating to the Division review of updates to the EMP. **The Permittee shall not reuse treated effluent prior to having an approved Final EMP, pursuant to NAC 445A.275.**
- c. **By February 28, 2007,** the Permittee shall provide the Division with the documentation that the local health agency has notified of the Permittee's intention to use effluent at the facility, and that the facility has been inspected and certified for cross-connection control.

Fact Sheet NEV2001514 / Durango Hills Family Golf Course Effluent Reuse Page 4 of 4

## **Procedure for Public Comment:**

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit is being sent to the **Las Vegas Review Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice. The comment period may be extended at the discretion of the Administrator. **All comments must be received by NDEP by 5:00 pm, January 8, 2007.** 

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator, or any interested agency, person, or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reason(s) why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with Nevada Administrative Code (NAC) 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NAC 445A.605.

#### **Proposed Determination:**

The Division has made the tentative determination to renew the permit for a period of five (5) years, subject to effluent and monitoring requirements.

#### **Rationale for Permit Requirements:**

The limitations and monitoring requirements are intended to provide for appropriate reuse of treated effluent, to minimize the possibility of adverse impact to groundwaters of the State, and to alert those persons who might have contact with treated effluent to its presence at the facility.

Prepared by: Janine Hartley

November, 2006